

## ***SSES Report Sample 1- For a Large Collection System – PLAN B***

This report sample describes in a single report a system that **IS FOUND TO BE IN SATISFACTORY CONDITION** after the initial inspections. Refer to Note 1 on the General guidelines. Only *Phase 1: Evaluation Report* is required in this case. **This sample reflects the level of thoroughness and clarity expected in the submittals. It should be reviewed carefully by whoever prepares the SSES for your facility.**

### **Phase 1: Evaluation Report**

#### **1.0 Facility Name and Location:**

Big Times and Blue Sea Condominium  
4411 SE Miami Drive

#### **2.0 System Description:**

This system includes a wet well/dry well type pump station with two ten-horsepower pumps, a run of six-inch force main, a grease trap, and a gravity collection system. The gravity collection system has roughly 1540 feet of 8-inch main, 360 feet of 6-inch main, and seven manholes. There are fourteen cleanouts on the laterals to these mains.

Pipe Length (Ft)	Pipe Diameter (in)	Material
220	6	Clay
120	6	PVC
20	6	CIP
1200	8	CLAY
340	8	CIP

#### **3.0 Evaluation Survey Information:**

Underground Investigations Engineers, Inc conducted the sanitary sewer evaluation survey for this facility on the following dates:

Smoke Testing	June 5, 1999
Flow Measurement	July 27-30, 1999
Visual Inspection	July 28, 1999
Second Smoke Test	August 28, 1999

Sewerfixers Extraordinary, Inc did the repair work required on the system during the period of August 5-14, 1999. Underground Investigations Engineers, Inc prepared the SSES report.

#### **4.0 Smoke Test:**

The gravity collection system was smoke tested on June 5, 1999. DERM was notified of the test on June 1, but elected not to attend. A 10,000 cubic foot smoke charge was set off in the wet well of the pump station and an Acme model AIR-100 blower was used to force the smoke into the system. Smoke was observed coming from the ground near the north east corner of the 100 building, and at the southeast corner of the 200 building.

#### **5.0 Flow Measurement:**

Total flow at this facility was measured by timing flow into the wet well of the pump station, after determining the capacity of the wet well by measurement. Measurements were taken at 2:00 am, 3:00 am, and 4:00 am

on the mornings of July 28, 29, and 30. The flows measured corresponded to daily flows ranging from a minimum of 940 GPD to 2360 GPD, with an average of 1270 GPD. The maximum measured flow of 2360 GPD is less than the calculated maximum permitted I/I value of 13712 GPD. Therefore, this system will not be required to carry out the further phases of the SSES.

#### **6.0 Visual Inspection of System:**

MR. W. E. Coyote of U.I.E carried out the visual inspection of the system on July 28, 1999. The number one manhole, about twenty feet west of the pump station, was in satisfactory condition. There was normal flow through the manhole, and physical condition was satisfactory. The invert of the manhole was 15.6 feet below grade.

The number two manhole, located about 300 feet north had observable infiltration at two places. Flow through the manhole was normal. The invert of the manhole was 12.5 feet below grade.

The number three manhole, located about 300 feet north, was in satisfactory condition. The collection system splits at this point, with flow entering the manhole from the north and the west. Flow through the manhole is normal. The invert of the manhole is 9.8 feet below grade.

The number four manhole, located about 320 feet north, was in satisfactory condition. Flow through the manhole is normal. The invert of the manhole is 7.0 feet below grade.

The number five manhole, located about 320 feet north, was in satisfactory condition. This is the terminal manhole for this run. There is now flow through this manhole. The invert of the manhole is 4.0 feet below grade.

The number six manhole, located about 300 feet west of manhole three, was in satisfactory condition. Flow through the manhole is normal. The invert of the manhole is 7.3 feet below grade. A six-inch main enters this manhole from the north, and a four-inch lateral enters from the west.

The number seven manhole, located 340 feet north, was in satisfactory condition. This is the terminal manhole for this run. A four-inch lateral enters this manhole from the west. The invert of the manhole is 4.0 feet below grade.

A photograph was taken of the interior of each manhole.

Fourteen cleanouts on laterals were located. Two of these laterals were not properly capped. These were the two locations found during the smoke testing.

#### **7.0 System Repairs:**

The two sources of infiltration in manhole number two were repaired. New covers and lids were installed on the incomplete cleanouts. Manhole liners were installed on all manholes.

#### **8.0 Re-testing:**

A second smoke testing was carried out on August 28, 1999, was following the same procedures as the first test. DERM was notified on August 24 and sent an inspector to monitor the test. No problems were discovered as a result of the second smoke test.

#### **9.0 Survey Conclusion / Final Status:**

This system is now determined to be in satisfactory condition for the duration of this evaluation cycle. The raw flow data, flow calculations, and photographs of the system manholes are supplied with this report.

Signed,

President, Underground Investigations Engineers, Inc.

Insert / Attach Sewer Collection System Drawing here. For sample see Attachment “A” at the end of this package.

## **SSES Report Sample 2- For a Large Collection System – PLAN B**

This report sample describes a system that **IS NOT FOUND TO BE IN SATISFACTORY CONDITION** after the initial inspections. Refer to Note 2 on the General Guidelines. There are four reports required in this case, with the possibility of additional reporting if the final inspection is not satisfactory. This hypothetical system contains many of the problems common to collection systems in this area. In conjunction with some of the problems, there are comment boxes describing the pertinent DERM regulations and the time frames for required correction of the problems.

**This sample reflects the level of thoroughness and clarity expected in the submittals. It should be reviewed carefully by whoever prepares the SSES for your facility.**

### **Phase 1: Evaluation Report**

#### **1.0 Facility Name and Location:**

Big Times and Blue Sea Condominium  
4411 SE Miami Drive

#### **2.0 System Description:**

This system includes a wet well/dry well type pump station with two ten-horsepower pumps, a run of six-inch force main, a grease trap, and a gravity collection system. The gravity collection system has roughly 1540 feet of 8-inch main, 360 feet of 6-inch main, and seven manholes. There are fourteen cleanouts on the laterals to these mains.

Pipe Length (Ft)	Pipe Diameter (in)	Material
220	6	Clay
120	6	PVC
20	6	CIP
1200	8	CLAY
340	8	CIP

#### **3.0 Evaluation Survey Information:**

Underground Investigations Engineers, Inc conducted the initial sanitary sewer evaluation survey for this facility on the following dates:

Smoke Testing	June 5, 1999
Visual Inspection	June 10, 15 1999
Second Smoke Test	June 18, 1999
Flow Measurement	July 27-30, 1999

Sewerfixers Extraordinary, Inc. did jetting to open the main between manholes one and two during the period of June 11-14, 1999. An attempt was made at this time to clear the main between manholes six and seven on June 17, but this was not successful. The repair work required for the cleanouts was done on June 20, 1999. Underground Investigations Engineers, Inc prepared the SSES report.

#### **4.0 Smoke Test:**

The gravity collection system was smoke tested on June 18, 1999. DERM was notified of the test on June 21, and sent an observer. A 10,000 cubic foot smoke charge was set off in the wet well of the pump station and an Acme model AIR-100 blower was used to force the smoke into the system. Smoke was observed coming from two open laterals, one of them had discovered during the visual inspection, the other had not. No smoke was observed to come from the other open clean out discovered by the visual inspection. The blockage in the main between manholes six and seven was reported to DERM at this time. Smoke was also observed coming from the ground some distance west of building 500. No clean out was found at this point,

but it appears to be from a lateral pipe. Smoke was also observed coming from the ground between manholes six and seven.

*It is apparent from the surcharge at manhole seven and the lack of flow into manhole six that the line is blocked between these two points. It also follows from these observations that sewage is escaping from the system, otherwise manhole seven would be overflowing. This is considered to be a serious failure of the system. DERM would require that this problem be corrected within 30 days of its being discovered.*

## 5.0 Flow Measurement:

Total flow at this facility was measured by timing flow into the wet well of the pump station, after determining the capacity of the wet well by measurement. Measurements were taken at 2:00 am, 3:00 am, and 4:00 am on the mornings of July 28, 29, and 30. The flows measured corresponded to daily flows ranging from a minimum of 19000GPD to 23000 GPD, with an average of 22000 GPD.

The maximum measured flow of 23000 GPD is greater than the calculated maximum permitted I/I value of 13712 GPD. Therefore, this system will be required to carry out the further phases of the SSES.

## 6.0 Visual Inspection of System:

Mr. W. E. Coyote of U.I.E carried out the visual inspection of the system on June 10, 1999. The number one manhole, about twenty feet west of the pump station, was in satisfactory condition. There was normal flow through the manhole, and physical condition was satisfactory. The invert of the manhole was 15.9 feet below grade.

The number two manhole, located about 300 feet north was surcharged to about 6 feet below grade. There appeared to be grease floating on top of the water in the manhole. The invert of the manhole could not be determined. The grease at the restaurant was examined and found to not be working. The visual inspection was halted at this time to await clearance of the surcharge condition.

An operating permit is required for all grease traps connected to public sewers. If your facility is not presently permitted, please contact Mr. Derrick Roby at 305-372-6508.

The visual inspection was recommenced on June 15, 1999. Flow in the number two manhole was satisfactory. There were two infiltration leaks into the manhole. The invert of the manhole is 13.1 feet below grade.

The number three manhole, located about 300 feet north, was in satisfactory condition. The collection system splits at this point, with flow entering the manhole from the north and the west. Flow through the manhole is normal. The invert of the manhole is 12.0 feet below grade.

The number four manhole, located about 320 feet north, had several infiltration leaks. Flow through the manhole was normal. The invert of the manhole is 8.0 feet below grade.

The number five manhole, located about 320 feet north, was in satisfactory condition. This is the terminal manhole for this run. There is no flow through this manhole. The invert of the manhole is 4.9 feet below grade.

The number six manhole, located about 300 feet west of manhole three, was in satisfactory condition. There was flow into this manhole from a four-inch lateral entering the manhole from the west, but no flow from a six-inch main entering from the north. The invert of the manhole is 7.3 feet below grade.

The number seven manhole, located 340 feet north, was surcharged to within two feet of grade. This is the terminal manhole for this run. Due to the surcharge, this manhole could not be further investigated.

A photograph was taken of the interior of each manhole.

Twelve cleanouts on laterals were located. Two of these laterals were not properly capped.

#### **7.0 System Repairs:**

The sources of infiltration in manholes two and four were repaired. New covers and lids were installed on the three incomplete cleanouts. The main between manholes six and seven was dug up where the smoke was observed and found to be broken. The main was repaired with a new section of pipe. The lateral west of building 500 was discovered to be broken and was repaired. Manhole liners were installed on all manholes. Sewerfixers Extraordinary, Inc. did all work on June 22, 1999.

#### **8.0 Re-testing:**

A third smoke testing was carried out on July 28, 1999, following the same procedures as the previous test. DERM was notified on July 24 and sent an inspector to monitor the test. No problems were discovered as a result of the second smoke test.

#### **9.0 Survey Conclusion / Final Status:**

The infiltration/inflow level in this system presently exceeds the allowable maximum. Therefore, additional inspection and repair work will be conducted as required by regulation. This document is submitted as the required Phase 1 report for the SSES. The additional Phase reports will be delivered as indicated on the Plan and Schedule for the SSES. The raw flow data, flow calculations, and photographs of the system manholes are supplied with this report.

Signed

President, Underground Investigations Engineers, Inc.

Insert / Attach Sewer Collection System Drawing here. For sample see Attachment “A” at the end of this package.

### **Phase 2: Investigation of Point Sources of I/I Report**

#### **1.0 Facility Name and Location:**

Big Times and Blue Sea Condominium  
4411 SE Miami Drive

#### **2.0 System Description:**

This system includes a wet well/dry well type pump station with two ten-horsepower pumps, a run of six-inch force main, a grease trap, and a gravity collection system. The gravity collection system has roughly 1540 feet of 8-inch main, 360 feet of 6-inch main, and seven manholes. There are fourteen cleanouts on the laterals to these mains.

### 3.0 Evaluation Survey Information:

Underground Investigations Engineers, Inc conducted the Phase 2 investigations for this facility on the following dates:

TV mains                      August 5-8, 1999

### 4.0 Survey Conclusion / Final Status:

The television inspection of the system revealed a badly broken main between manholes three and four, 174 feet north of manhole three. Several other small infiltration leaks were also detected and located. Repair of the broken main will require excavation and replacement. The other leaks can be repaired using in-place techniques.

Copies of the videotapes of the TV main inspections are available upon request.

This document is submitted as the required Phase 2 report for this facility.

Signed

President, Underground Investigations Engineers, Inc.

## **Phase 3: Repairs Report**

### 1.0 Facility Name and Location:

Big Times and Blue Sea Condominium  
4411 SE Miami Drive

### 2.0 System Description:

This system includes a wet well/dry well type pump station with two ten-horsepower pumps, a run of six-inch force main, a grease trap, and a gravity collection system. The gravity collection system has roughly 1540 feet of 8-inch main, 360 feet of 6-inch main, and seven manholes. There are fourteen cleanouts on the laterals to these mains.

### 3.0 Repair Work:

Sewerfixers Extraordinary, Inc did the repair work required on the system during the period of January 12-21, 2000. The broken main between manholes three and four was dug up and replace with a section of new 8-inch PVC sewer main. The other leaks were sealed in place using epoxy grout. A list of the locations of these leaks is provided with this report.

*Permits may be required for repair work, depending on type of work and location of facility.*

### 4.0 Survey Conclusion / Final Status:

Underground Investigations Engineers, Inc prepared the SSES report. The document is submitted as the required Phase 3 report for this facility.

Signed

President, Underground Investigations Engineers, Inc.

## **Phase 4: Re-measure Flow after Repairs Report**

### **1.0 Facility Name and Location:**

Big Times and Blue Sea Condominium  
4411 SE Miami Drive

### **2.0 System Description:**

This system includes a wet well/dry well type pump station with two ten-horsepower pumps, a run of six-inch force main, a grease trap, and a gravity collection system. The gravity collection system has roughly 1540 feet of 8-inch main, 360 feet of 6-inch main, and seven manholes. There are fourteen cleanouts on the laterals to these mains.

### **3.0 Evaluation Survey Information:**

Underground Investigations Engineers, Inc conducted the initial sanitary sewer evaluation survey for this facility on the following dates:

Flow Measurement	June 17-20, 2000
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Underground Investigations Engineers, Inc prepared the SSES report.

### **4.0 Flow Measurement:**

Total flow at this facility was measured by timing flow into the wet well of the pump station, after determining the capacity of the wet well by measurement. Measurements were taken at 2:00 am, 3:00 am, and 4:00 am on the mornings of July 28, 29, and 30. The flows measured corresponded to daily flows ranging from a minimum of 940 GPD to 2360 GPD, with an average of 1270 GPD.

The maximum measured flow of 2360 GPD is less than the calculated maximum permitted I/I value of 13712 GPD. Therefore, this system is now in compliance with the requirements of Chapter 24 of the Miami-Dade County Code.

### **5.0 Survey Conclusion / Final Status:**

This system is now determined to be in satisfactory condition for the duration of this evaluation cycle. The raw flow data, and flow calculations are supplied with this report. This document is submitted as the required Phase 4 report for this facility,

Signed

President, Underground Investigations Engineers, Inc.

## **Phase 5: Additional Repairs OR Cost-Benefit Analysis Report**

If you need to complete Phase 5, please contact the PSO Program Coordinator at DERM – Wastewater Section, 305.372.6899, for specific instructions for this report.

## Attachment “A”

### Big Times & Blue Sea Condominium

